## BRITISH FUNGI.

By M. C. Cooke.

(Continued from page 39.)

Radulum deglubens. B. & Br. Ann. N. H., No. 1440.

Orbicular, ferruginous, subdiaphanous; tubercles erect, subcylindrical, irregular, scattered, interstices even, pulverulent from the white spores.

On ash. Jan. Forres. New Pitsligo.

About  $\frac{1}{2}$  inch across.

Radulum corallinum. B. & Br. Ann. N. H., No. 1441.

Effused, white; subiculum shining, very thin, pelliculose; tubercles fasciculate, divided, obtuse, coralloid.

Oak branches. Scotland.

Effused for three inches; fascicles of tubercles  $\frac{1}{4}$  or more across.

Radulum epileucum. B. & Br. Ann. Nat. Hist., No. 1442.

Effused, ochraceous white, wholly resupinate; subiculum snowy white, covered by a waxy stratum; tubercles scattered, cylindrical, slightly fimbriate, deciduous.

On decorticated wood. Glamis.

Effused for several inches, tubercles falling out and showing the white mealy subiculum, round which is an annular depression.

Grandinia crustosa. Pers. Fr. Epic. ed. ii., p. 627.

Floccoso-farinaceous, irregularly effused, crustaceous, adnate, white; granules somewhat rounded, crowded, obtuse.—Berk. & Br. Ann. N.H., No. 1443. Nees Sys. f. 247.

On Polyporus versicolor. Glamis. Feb.

Kneiffia subgelatinosa. B. & Br. Ann. N.H., No. 1440.

Thin, yellowish then cream-coloured; granules minute, subgelatinose, fimbriate at the tips.

On stumps of felled firs. Glamis.

Accompanied by a green alga, which penetrates the tissue of the fungus.

Craterellus clavatus. Fr. Epic. ed. ii., p. 632.

Pileus fleshy, turbinate, truncate or depressed, flexuous, unpolished, becoming somewhat yellowish, attenuated into a solid stem; hymenium even then corrugated, purplish then discoloured.
—Sverig. Atl. t. 91. Berk. & Br. Ann. N. H., No. 1445. Krombh. t. 45, f. 13-17.

In a beech wood. Bisham, Berks.

Cyphella fraxinicola. B. & Br. Ann. N.H., No. 1446.

Minute, orbicular, externally snow-white, shortly villose; disc yellow, becoming brownish with the spores, proliferous.

On ash. Batheaston.

Hyphelia rosea. Fr. Sys. Myc. iii. 211.

Thallus radiating, white, pseudo-peridium flattened, pubescent, membranaceous, very fragile; spores minute, glolose.—Berk. & Br. Ann. N. H., No. 1447.

New Pitsligo.

Clavaria curta. Fr. Epic. ii., 668.

Small, very much branched, greenish-yellow; stem none; branches short, crowded, obtuse.—B. & Br. Ann. N. H., No. 1448.

On the ground. Coed Coch. Holm Lacy.

Clavaria tuberosa. Sow. Fung. t. 199.

Simple, yellowish, attenuated at the apex, swollen in a bulbous manner at the base, attached by mycelioid fibrils.

On sticks. Forres (Rev. J. Keith).

"Exactly the long lost plant of Sowerby, which is perhaps too near *C. ardenia*; and possibly the same may be said of *C. juncea*, notwithstanding the great difference of size."—*B. & Br. N. II.*, *Jan.* 1875, *pp.* 32.

Trichobasis Primulæ. Cooke. Fungi Britt. ii., No. 141. Uromyces Primulæ, Lev. "Cooke Handbook," No. 1471.

Trichobasis Iridis. Cooke Fungi Britt. ii., No. 142. Uromyces Iridis, Lev. "Cooke Handbook," No. 1466.

Trichobasis Ulmariæ. Cooke, Fungi Britt.ii., No. 146. Uromyces Ulmariæ, Lev. "Cooke Handbook," No. 1461.

These three species all clearly belong to *Trichobasis*, and not to *Uromyces*. The peduncles are very fugacious, to say nothing of other points of structure in which the affinities are decidedly with *Trichobasis*.

Eustegia arundinacea. Fr. Elench., ii., 112.

Erumpent, operculum collapsing, depressed, umbonate; cups at first membranaccous, pallid, then black. Asci linear clavate, sporidia narrowly elliptical or subfusiform, straight, 1-2 nucleate, paraphyses copious, linear.—Berk. & Br. Ann. N. Hist., No. 1500. Stegia Arundinacea, Fckl. Syn., App. 328. Peziza Kneiffii, Wallr, Crypt. Fl. pp. 483 (not Rehm).

On reeds. New Pitsligo (Rev. J. Fergusson).

Sporidia '01 mm, long.

This is one of the plants about which much confusion has gathered. Under the name of Peziza Kneiffii, specimens are found in some herbaria which are only forms of Peziza fusca, and Dr. Rehm has published in his Ascomyceten a very neat little Peziza under the name of Peziza Kneiffii, which is something very different. This is a true Peziza of the section Dasyscypha to which we have attached the name of Peziza Winteri, Dr. Winter having collated most of Dr. Rehm's species. Specimens of Peziza Kneiffii from the late C. Montagne, of Eustegia arundinacea from Fries, and also from Mougeot, are all, with slight variations in the size of the sporidia, intrinsically the same.

Hysterium (Lophodermium) arundinaceum. Schrad. var. gramineum.

H. culmigenum, var. B. Fr. Sys. Myc., ii., 591. On leaves of grass. Forres.

Var. culmigenum. Fr. Cooke Fungi Britt., i., No. 459. On sheaths of reed.

Nectria citrino-aurantia. Lacr. Grevillea, ii., p. 164. Berk. & Br. Ann. N. H. No. 1492, t. 2, f. 8. On willow twigs. Batheaston, Dec. Sporidia oblong (.0003-.00035 in.) .0075-.0085 m.m. long.

Sphæria (Villosæ) membranacea. B. & Br. Aun. N. H. No. 1493, t. 2 f. 9.

Semi-immersed, perithecia large, membranaceous, clad with short flexible hairs; sporidia shortly fusiform, uniseptate.

On very rotten wood. Langridge. Ap.

Sporidia ( $\cdot 0015 \times \cdot 0007$  in.),  $\cdot 035 \times \cdot 0175$  m.m., accompanied by a minute flask-shaped Sphæronema, with a long slender neck and minute globose spores; probably its stylosporous state. B. & Br.

Venturia Alchemillæ. B. § Br. Ann. N. H., No. 1493.\* Perithecia minute, crowded in small stellate spots, asci. short; lanceolate; sporidia fusiform, uniseptate.—Asteroma Alchemillæ. Grev. Fl. Ed., p. 369. Stigmatea Alchemilla, Cooke Handbook, No. 2796. Fckl. Symb. Myc., p. 96. Fckl. Fungi, Rhen, No. 425. On leaves of Alchemilla,

Sporidia (.0005 in.), .0127 m.m. long.

The following species are also figured on Plate 48, fig. 7; Dendryphium ramosum, C., Plate 49, fig. 1; Puccinia malvacearum, 2. P. Polygonorum; 3. P. Lychnidearum; 4. P. Mahringia; 5. P. violarum; 6. P. Umbilici; 7. P. Saniculæ; 8. P. Primulæ; 9. P. compositarum; 11. P. Prunorum; and 12. P. Tunaceti, all  $\times$  500 (see scale).

Thelephora intybacea. Fr. Epicr. ii., 635.

Cæspitose, soft, whitish then ferruginous—red, at length fuliginous; stems somewhat lateral, growing together; pilei imbricate, fibrous, margin dilated, at first fimbriate and whitish, then entire and of one colour; hymenium inferior, papillose, subfloccose. Pers. Syn., p. 567; Bull. Champ. t. 483 f. 6-7, and t. 278.

On the ground in woods. Glamis. Rev. J. Stevenson. Exhibited at the Fungus Show at Perth.

Geaster Michelianus. B. & Br.

Mr. Worthington G. Smith has expressed an opinion in the "Gardener's Chronicle" that Geaster cryptorrhynchus, Kalch., figured and described by Professor Hazslinszky in this journal, is identical with the above species. There is a slight difference in the size of the spores in Hazslinszky's specimen and the Geaster Michelianus found by Mr. Beech in this country, but that alone would not be sufficient to maintain them as distinct.

Badhamia fulvescens. Cooke,

Peridia sessile, subglobose, scattered, or 3-6 together, tawny-ochre, towards the base clad with a delicate white pubescence; spores pale brown, minute, ovate.

On old sacking. Dupplin Castle, Perth. Spores ('0003 in.) '0075 m.m. diam.

The cysts investing the spores are quite distinct. I am indebted to Mr. C. E. Broome for examining this plant, and he coincides in the opinion that it is undescribed.

Ustilago intermedia. Schröter.

Produced within the florets, violet-brown; spores subglobose, ovate, or shortly elliptic, rather large; epispore minutely spinulose.—Schröter in Rabh. F. Eur. No. 1696.

On flowers of Scabiosa. Scotland. Rev. J. Fergusson.

The spores are larger and darker than in *U. flosculorum*; in the latter being 01 m.m., and in the present species 015 m.m.

Isaria spumarioides. Cooke.

Densely caspitose, white, palmate or infundibuliform; apex crispate, lobed, or serrate, attenuated downwards into a slender stem, more or less connate; spores subglobose, minute.

On bark. Knowsley, Rev. H. Higgins.

A very curious and distinct species, not unlike Spumaria alba at a superficial glance, forming large patches an inch broad. Spores '004-'005 m.m. diam.

Clasterisporium vermiculatum. Cooke.

Effused, forming a thin black stratum on the wood; mycelium creeping, branched or simple, septate, brown; spores erect, often fasciculate, cylindrical-fusiform, dark brown, multiseptate, straight, curved or geniculate, obtuse and pale at the extremities (15-2 m.m. long).

On oak wood. Hereford. Mr. Griffith Morris.

This interesting black mould is certainly congeneric with Clasterisporium caricinum, Schweinitz, and resembles Helminthosporium without flocci, the spores being seated on the mycelium. Another rather aberrant form we have received from J. B. Ellis, New Jersey, U.S., to which the name of Clasterisporium subulatum, C., has been given, in which the apices of the spores are subulate. Clasterisporium pedunculatum, Peck, is — Helminthosporium attenuatum, C. & P.

Virgasporium.—Dr. Saccardo has pointed out that the genus characterised under this name in "Grevillea" is identical with Cercospora, Freis, and that Virgasporium maculatum is equal to Cercospora Resedæ, Fckl. Sym. Myc. p. 353, and Fung. Rhen. No. 1632. Such being the case the other species will bear the name of Cercospora clavata.